

DATE: January 7, 2003

TO: Division of Drinking Water Staff

THROUGH: Robert B. Taylor, P.E., Director
Division of Drinking Water

FROM: Susan E. Douglas, P. E., Technical Services Engineer
G.W.Peaks, P. E., Director of Technical Services
Deputy Field Directors
Division of Drinking Water

SUBJECT: Permits & Project Review – General Permit & Local Review Programs

Delete: WM 787 (Section 20.05 and Appendices 20 C, 20 N, 20 O)

Summary Statement

Section 12 VAC5-590-300 of the *Waterworks Regulations* provides the basis for all approved local review and approval programs. This is a two step procedure to delegate, by General Permit, plan review authority involving water distribution mains to a waterworks owner, or their representative.

STEP ONE: The waterworks owner must first adopt, and then obtain VDH Division of Drinking Water approval of General Specifications and Plan Details covering all aspects of water distribution mains. The requirements of these specifications must be at least as stringent as the requirements of the latest *Waterworks Regulations*.

STEP TWO: The Waterworks owner shall enter into a Memorandum of Understanding (MOU) with the VDH Division of Drinking Water outlining waterworks-specific provisions and the owner's method of compliance. These provisions include the following:

1. The maximum size of pipe covered by the General Permit. This can vary from waterworks to waterworks, but is intended to only include distribution mains (as opposed to transmission mains). This has generally been 12-inch diameter. See the definitions in the *Waterworks Regulations* if you need further clarification.
2. The procedure to amend or modify the General Specifications. This is handled differently by utilities: some update specific sections or pages, others revise their entire standards. The sample MOU in Appendix A provides typical language. More detailed language may be needed to define procedures.
3. For review authority to be granted, the waterworks owner must maintain (or retain) adequate engineering staff to conduct such reviews. Adequate staff means at least one individual licensed as a Professional Engineer (P.E.) in Virginia with at least two years experience in the design and construction of water distribution systems. An individual with a governmental exemption does not qualify for this delegation of authority. The P.E. must sign their approval on all projects processed under the General Permit.
4. The MOU must require that engineering plans and specifications be prepared for each individual project prior to any construction. The General Permit does NOT allow a waterworks owner to construct water distribution mains without plans. Projects, where the

waterworks owner acts as both design engineer AND review engineer, are not generally allowed. When allowed there must be a clear separation of design and review responsibilities, i.e. different departments or divisions etc.

5. The general distribution system map of the waterworks must be updated annually. Records, including copies of all project documents and approvals must be available for VDH inspection.
6. The waterworks owner agrees to submit an annual report and statistical summary of all projects approved and/or constructed under the terms of the MOU and General Permit. This would include any other appropriate reports deemed necessary.
7. Once Steps One and Two are completed, a General Permit for Distribution Mains may be issued with the MOU attached. This permit allows both construction and operation of distribution mains. The General Permit is included in Appendix B.

Expiration Date and Reissuance of General Permits

The typical duration of a General Permit is 5 years. After a review of the utility's adherence to the MOU, the General Permit may be reissued. If the Waterworks Regulations have been revised during the General Permit period, then the utility's standards must be reviewed and updated if required, prior to reissuance of the General Permit.

Periodic Audit of Local Review Programs

The VDH Division of Drinking Water should audit a utility's Local Review Program concurrently with the sanitary survey of the distribution system. The Program must be audited by VDH prior to reissuance of the General Permit.

APPENDIX A

(VDH Letterhead)

MEMORANDUM OF UNDERSTANDING
General Permit for Distribution Mains

(Name and address of Waterworks owner)

SUBJECT:

Water – (waterworks name)

A waterworks owner may apply for a General Permit for Distribution Mains, if they have on record with the Department of Health, Division of Drinking Water, approved general specifications and plan details covering distribution waterline design and construction. This is allowed in accordance with Section 12 VAC5-590-300 of the Commonwealth of Virginia, State Board of Health, *Waterworks Regulations*. This permit delegates the Health Department's review and approval authority for distribution mains to the waterworks owner. In order to receive and maintain this General Permit for Distribution Mains the waterworks owner must establish a program consisting of the following items set forth in this MEMORANDUM OF UNDERSTANDING.

1. This General Permit is limited to the review and approval prior to any construction of distribution main extension projects only. The maximum pipe diameter to be reviewed under this program shall be _____ inches.
2. Any modifications of the _____ (waterworks' owner) general specifications and plan details must be approved by the Commissioner and any such modification shall be at least as stringent as the latest edition of the *Waterworks Regulations*.
3. A review staff satisfactory to the appropriate Field Director and including at least one Professional Engineer licensed to practice in Virginia shall be maintained (or retained on contract) by _____ (waterworks' owner). Any change of the licensed Professional Engineer shall be reported immediately to the appropriate Field Director.
4. All individual projects shall have specific engineering plans and specifications.
5. _____ (waterworks' owner) shall maintain an up-to-date distribution system map and keep on file copies of all approved project plans.
6. A project approval report for each project reviewed and approved under the General Permit shall be completed with a copy forwarded to the Field Office. (An example of a Project Report is attached). This report shall include project location, pipe material, diameter, length, and hydraulic capacity, design population (or number of connections), and minimum and maximum pressures before and after the project. Fire flow capability must also be addressed.

7. On an annual basis, submit the following information to the _____ (FO name) Field Office of the Division of Drinking Water:
 - a. an overall distribution system map showing the overall system layout with pipe diameters and hydraulic capacities;
 - b. the number of connections, by category, currently connected to the waterworks; and
 - c. the average daily demand and peak daily demand for each of the preceding 12 months, unless this data has been previously reported.
8. The Field Director may at any time require the submittal of any set of project plans and specifications submitted to or prepared by (waterworks' owner) under the General Permit.
9. The conditions contained in this MEMORANDUM OF UNDERSTANDING shall be adhered to throughout the duration that (waterworks' owner) holds a valid General Permit.
10. This MEMORANDUM OF UNDERSTANDING may be revoked by either party at any time. Revocation of the General Permit by the Commissioner automatically revokes the MEMORANDUM OF UNDERSTANDING.

Waterworks Name & Owner

Date

Engineering Field Director

Field Office

Date

The conditions as outlined above are satisfactory to allow (waterworks' owner) to be issued a General Permit for Distribution Systems.

Date

Director, Division of Drinking Water

P.E.

Date

MEMORANDUM TO: Field Office Director,
Division of Drinking Water

FROM:

SUBJECT: Waterline Project Report

REFERENCE: Memorandum of Understanding, Local Review Program

PROJECT NAME:

PROJECT LOCATION:

PLANS PREPARED BY:

PROJECTED CONSTRUCTION DATE:

Pipe: Size _____ Length _____ Material _____

Water Source:

Average Production for Last Three Months:

Maximum Daily Demand:

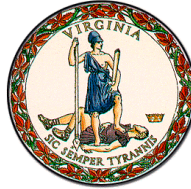
Water Storage: Existing Capacity - _____ MGal
Tank to Serve this Area - _____ ft
Tank Overflow Elevation - _____ ft
Tank Bottom Elevation - _____

Existing Service Area Evaluation After New Project Added:

Minimum Pressure - _____ psi
Maximum Pressure - _____ psi
Minimum Fire Flow Provided - _____ gpm

Hydraulic Capacity and Design: Pressures - Minimum _____ psi
Maximum _____ psi
Using tank at _____
Fire Flow Provided _____

	Number of Connections	Average Daily Usage
Domestic	_____	Usage _____ gpd
Commercial	_____	Usage _____ gpd
Industrial	_____	Usage _____ gpd
Other (Identify)	_____	Usage _____ gpd
Domestic	_____	Usage _____ gpd
TOTAL	_____	TOTAL _____ gpd



COMMONWEALTH OF VIRGINIA

DEPARTMENT OF HEALTH
DIVISION OF DRINKING WATER

GENERAL PERMIT FOR CONSTRUCTION AND OPERATION OF WATERWORKS DISTRIBUTION MAINS

Waterworks owner Is Hereby Granted Permission To Construct Waterline Extensions Located at System Name in
City / Town / County in Accordance With the Provisions of Title 32.1, Chapter 6, Article 2, Sections 32.1 - 172 and 173
Code of Virginia as Amended and 12 VAC 5-590-190, 12 VAC 5-590-230, and 12 VAC 5-590-300 of the *Waterworks*
Regulations of the Virginia Department of Health As Amended. This Permit is Issued In Accordance With the Following
General Specifications and Plan Details Covering Water Supply Main Design and Construction and the Attached
Memorandum of Understanding. _____

PERMIT NO. _____

EFFECTIVE DATE _____

EXPIRATION DATE _____

APPROVED _____ P.E.
Director, Division of Drinking Water
for the State Health Commissioner pursuant to VA Code § 2.2-60